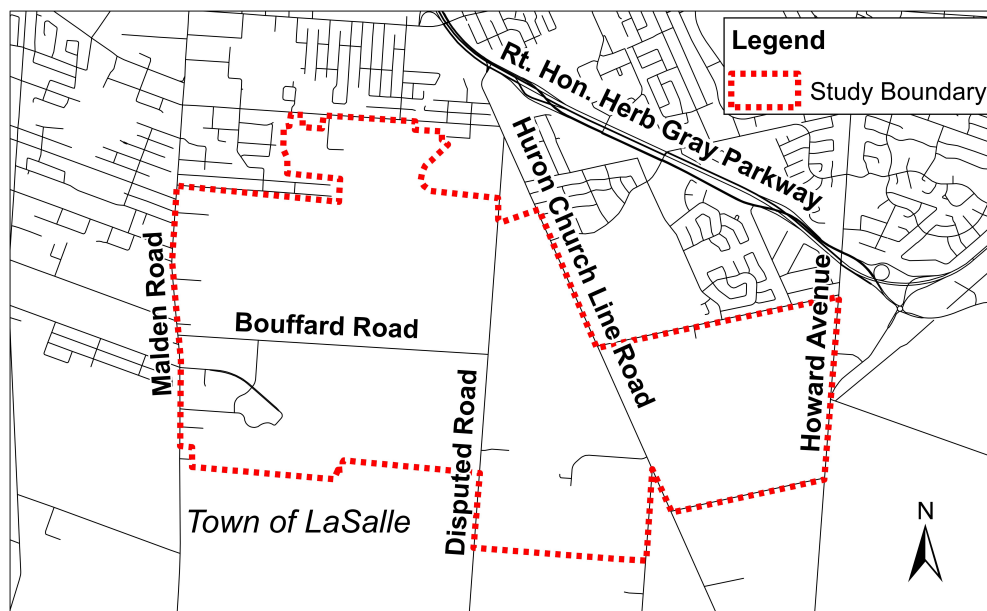


Town of LaSalle: Howard/Bouffard Planning Area Master Drainage Study Notice of Public Information Centre No. 2

The Town of LaSalle has retained Dillon Consulting Limited to prepare a comprehensive solution to address stormwater overflow into the Howard and Bouffard Planning Area during major storm events. The study area is shown below. The study is being completed following the requirements of the Municipal Class Environmental Assessment process for a Master Plan. The purpose of the study is to identify anticipated flood extents under existing conditions and to develop a strategy to address the flooding under existing and future developed conditions.

The project team has reviewed the feedback received from stakeholders following Public Information Centre No. 1 held at the LaSalle Civic Centre on June 26, 2019. Based on the feedback received, refinements have been made to the recommended solution. Public Information Centre No. 2 will focus on the revised recommended solution including the rationale and additional information for stakeholder review.

It is intended that the recommended solution will address the existing flood potential while also providing stormwater management to facilitate development in the area.



The project team will be displaying the revised recommended solution for public input at a Public Information Centre as outlined below. Please join us to learn more about the project and provide your feedback.

Date: December 12, 2019
Time: 4:00 to 7:00 p.m.
Location: Council Chambers, LaSalle Civic Centre, 5950 Malden Rd, LaSalle, ON

If you have any questions about this project, please contact either of the individuals listed below.

Mark Hernandez, P.Eng.
Project Manager
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Tel: 519.948.4243, ext. 3242
Email: HowardBouffard@dillon.ca

Peter Marra, P.Eng.
Director of Public Works
Town of LaSalle
5950 Malden Road
LaSalle, ON N9H 1S4
Tel: 519.969.7770, ext. 1475
Email: PMarra@lasalle.ca

Howard/Bouffard Planning Area Master Drainage Study

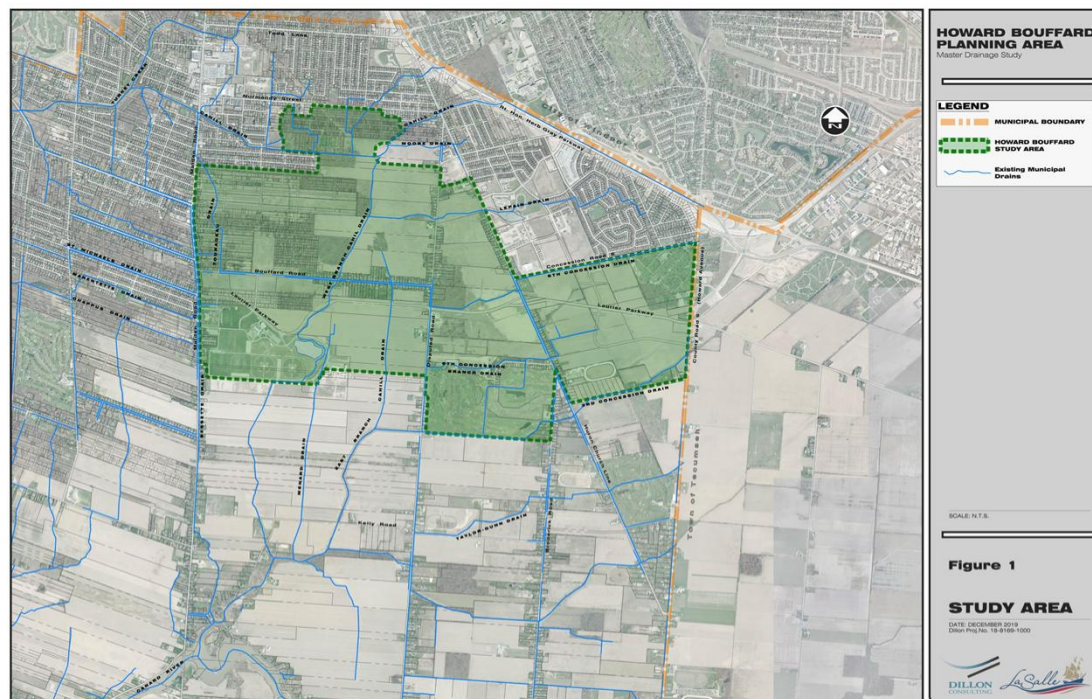
Public Information Centre #2

Town of LaSalle
December 12, 2019

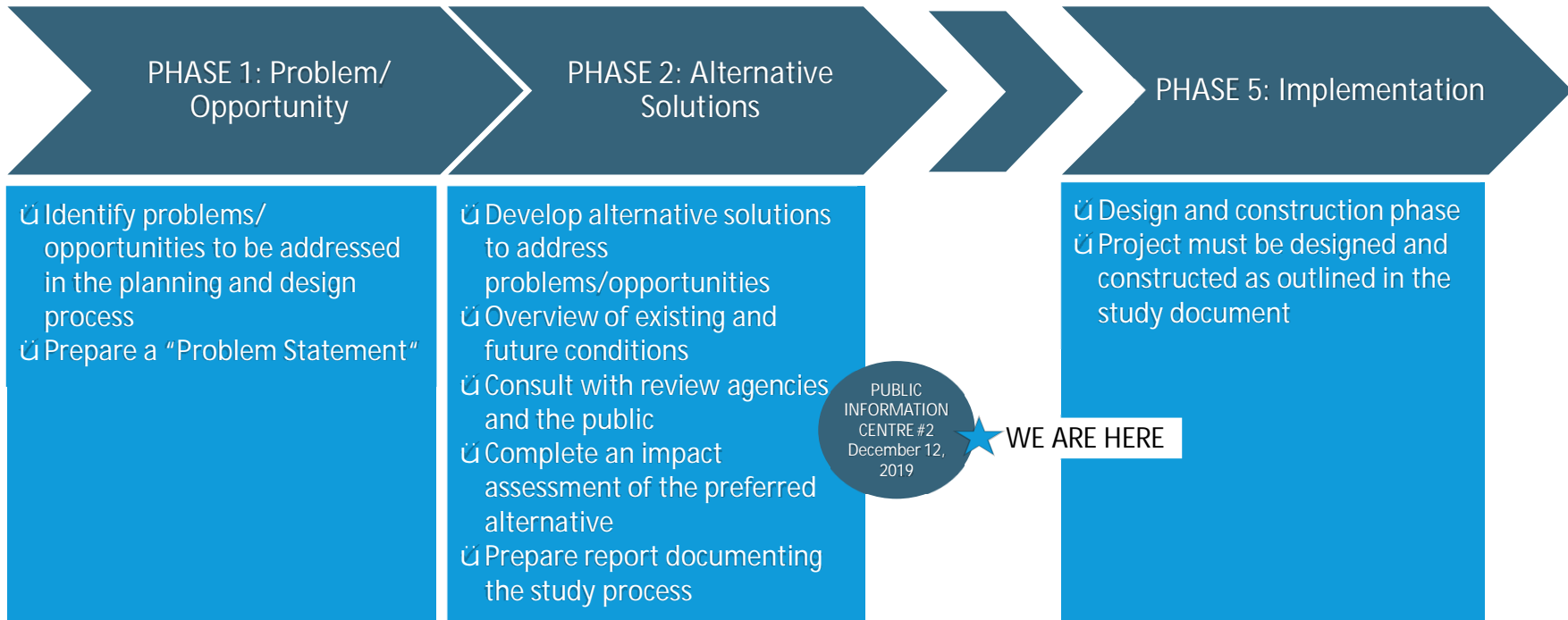


Background

- Study Area is primarily designated residential and is planned to be developed over several years
- Several studies have been completed to plan for new infrastructure in the area:
 - Bouffard and Howard Planning Districts Functional Design Study (2005) and Addendum (2017)
 - Environmental Study Report for Laurier Parkway between Malden Road and Howard Avenue (2009)
 - Detailed design and construction of Laurier Parkway (2010)
 - Design and construction of the expansion of the Vollmer Complex and related stormwater management facility (2010).
- Previous studies addressed stormwater management (SWM) for minor and major events however, spill-over from adjacent drainage areas was not considered
- The Town of LaSalle and Essex Region Conservation Authority are only able to issue approvals for development areas outside of the flood inundation area.



Class Environmental Assessment Process



The Study is following the requirements of the *Municipal Class Environmental Assessment (EA) (2015)* for a Master Plan. The study is following Phases 1 and 2 of the process.

The study is a critical step for the Town and Essex Region Conservation Authority to allow development to proceed in the area. The objective is to prepare a comprehensive solution to address stormwater overflow into the Howard and Bouffard Planning Area during major storm events.

The Class EA process requires that:

- ü Relevant social, environmental and engineering factors are considered in the planning and design process
- ü Public and agency input is integrated into the decisions.

Study Purpose



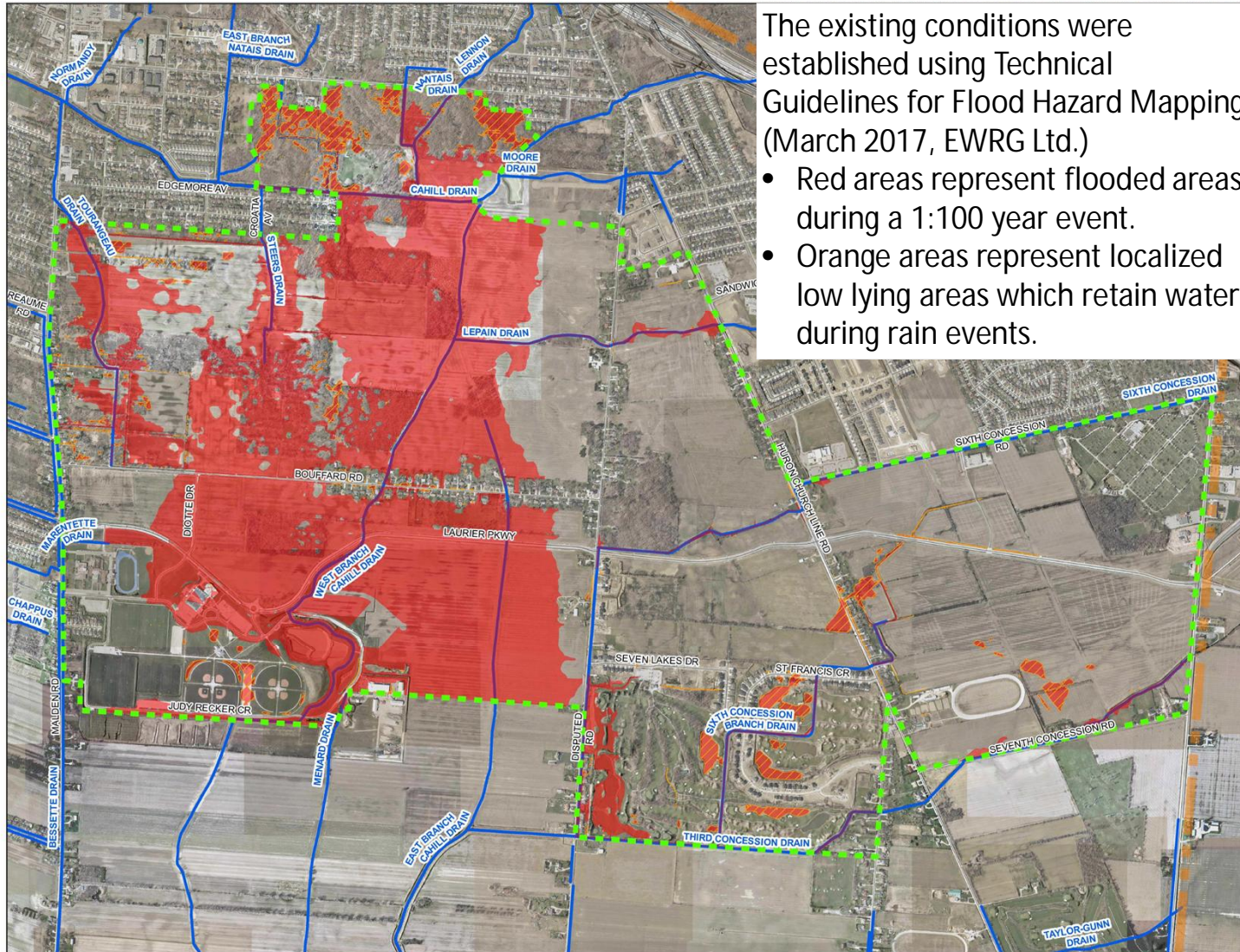
- Build on the solutions developed through the Bouffard Howard Planning Districts Class Environmental Assessment Addendum (March 2017)
- Define the flood mapping for existing conditions
- Establish build-out conditions and develop an implementation strategy to mitigate flooding in the area
- Estimate costs for identified solutions as well as cost recovery mechanisms
- Establish property requirements to facilitate the improvements.

Purpose of Public Information Centre #2



- Public Information Centre #1 was held on June 26, 2019 and illustrated the alternatives considered to date and the recommended solution.
- Since that time, the project team has received feedback from project stakeholders including landowners, developers, agencies and municipal departments.
- In order to ensure that all future development within the planning area can be accommodated by the proposed works, the recommended solution has since been revised to reflect the following:
 - Increased developable lands within the Planning Area
 - Revised drainage solution in the northwest extents of the Planning Area
 - Revised drain alignments and drain enclosures
 - Revised pond size and pump station capacity
 - Revised structure sizes including bridges, box culverts and weirs
- The project team is seeking input on the revised recommended solution.

Existing Conditions - Flood Extents



The existing conditions were established using Technical Guidelines for Flood Hazard Mapping (March 2017, EWG Ltd.)

- Red areas represent flooded areas during a 1:100 year event.
- Orange areas represent localized low lying areas which retain water during rain events.

HOWARD BOUFFARD PLANNING AREA

Master Drainage Study

LEGEND

- MUNICIPAL BOUNDARY
- STUDY AREA
- DEPRESSION STORAGE AREA
- FLOOD EXTENT*
- EXISTING DRAIN OR WATERWAY
- STREET CENTRELINE

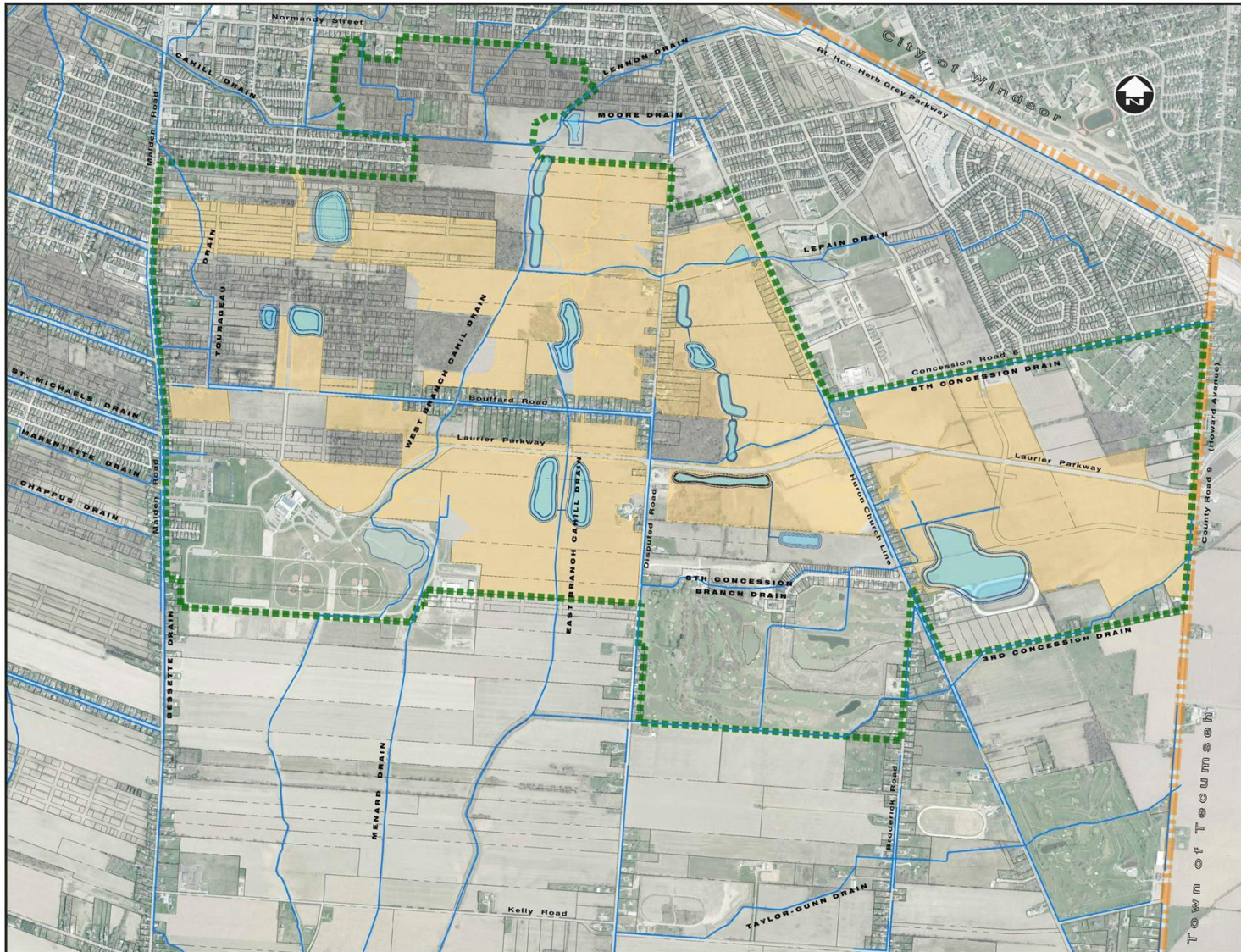
*NOTE: FLOOD EXTENTS HAVE ONLY BEEN ILLUSTRATED WITHIN THE STUDY AREA. FLOODING DOES EXTEND BEYOND THE STUDY LIMITS.

SCALE: N.T.S.

Figure 2
EXISTING 1:100 YEAR FLOOD EXTENTS

DATE: DECEMBER 2019
Dillon Proj.No. 18-8160-1000

Development Potential (From PIC#1)



HOWARD BOUFFARD PLANNING AREA

Master Drainage Study

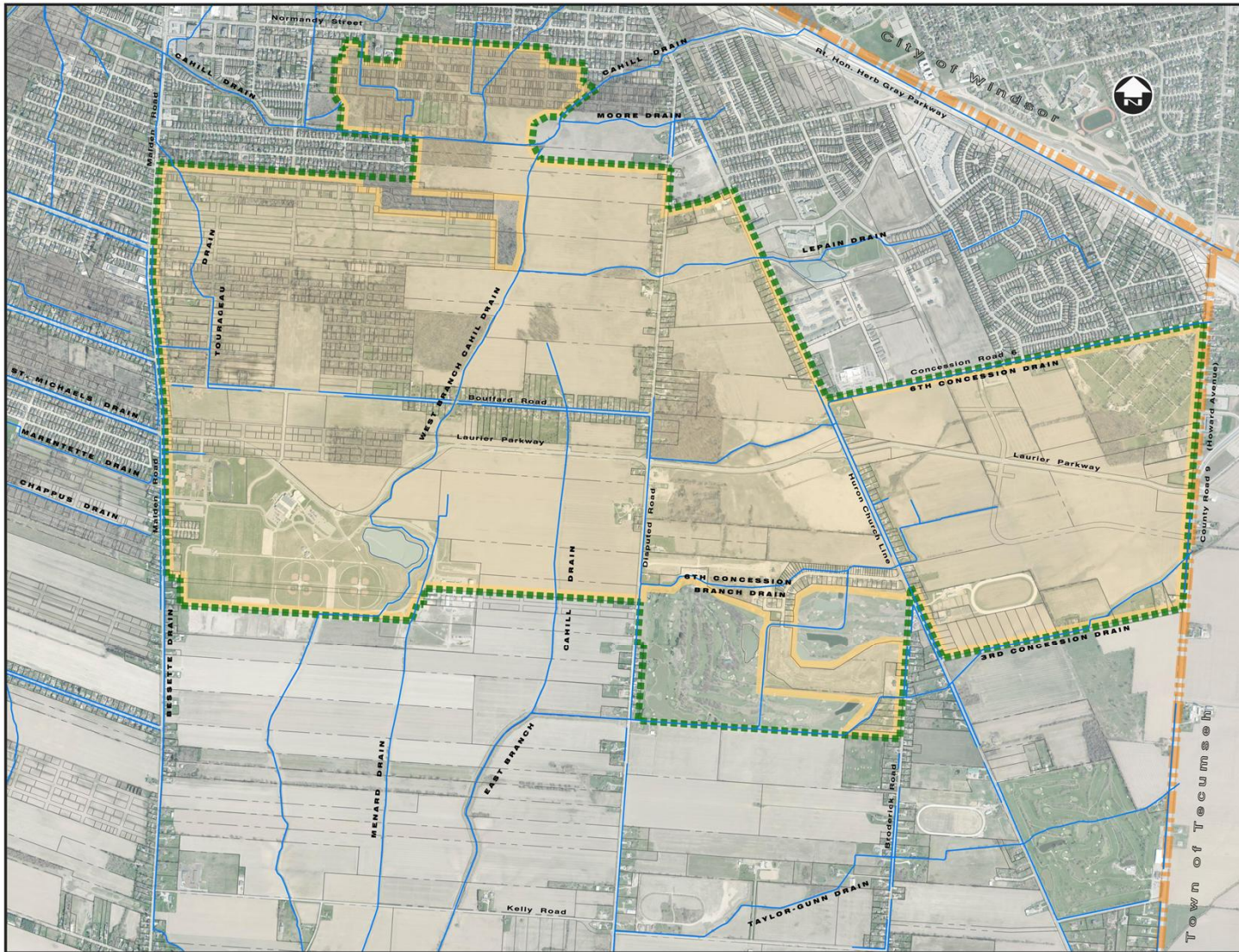
- LEGEND**
- MUNICIPAL BOUNDARY
 - HOWARD BOUFFARD STUDY AREA
 - KNOWN AREAS OF ACTIVE DEVELOPMENT WITHIN THE HOWARD BOUFFARD AREA
 - Pond Locations Identified In 2017 E.A. Addendum
 - Existing Municipal Drains

SCALE: N.T.S.

HOWARD BOUFFARD DEVELOPMENT AREAS

DATE: JUNE 2019
Dillon Proj. No. 18-8169-1000

Existing and Revised Development Potential



HOWARD BOUFFARD PLANNING AREA

Master Drainage Study

LEGEND

	MUNICIPAL BOUNDARY
	HOWARD BOUFFARD STUDY AREA
	Areas of Existing and Potential Development
	Existing Municipal Drains

NOTE:

1. Lands which are not included in the Proposed Solution may still benefit from the works as it addresses the existing conditions flood inundations as shown on Figure 2.

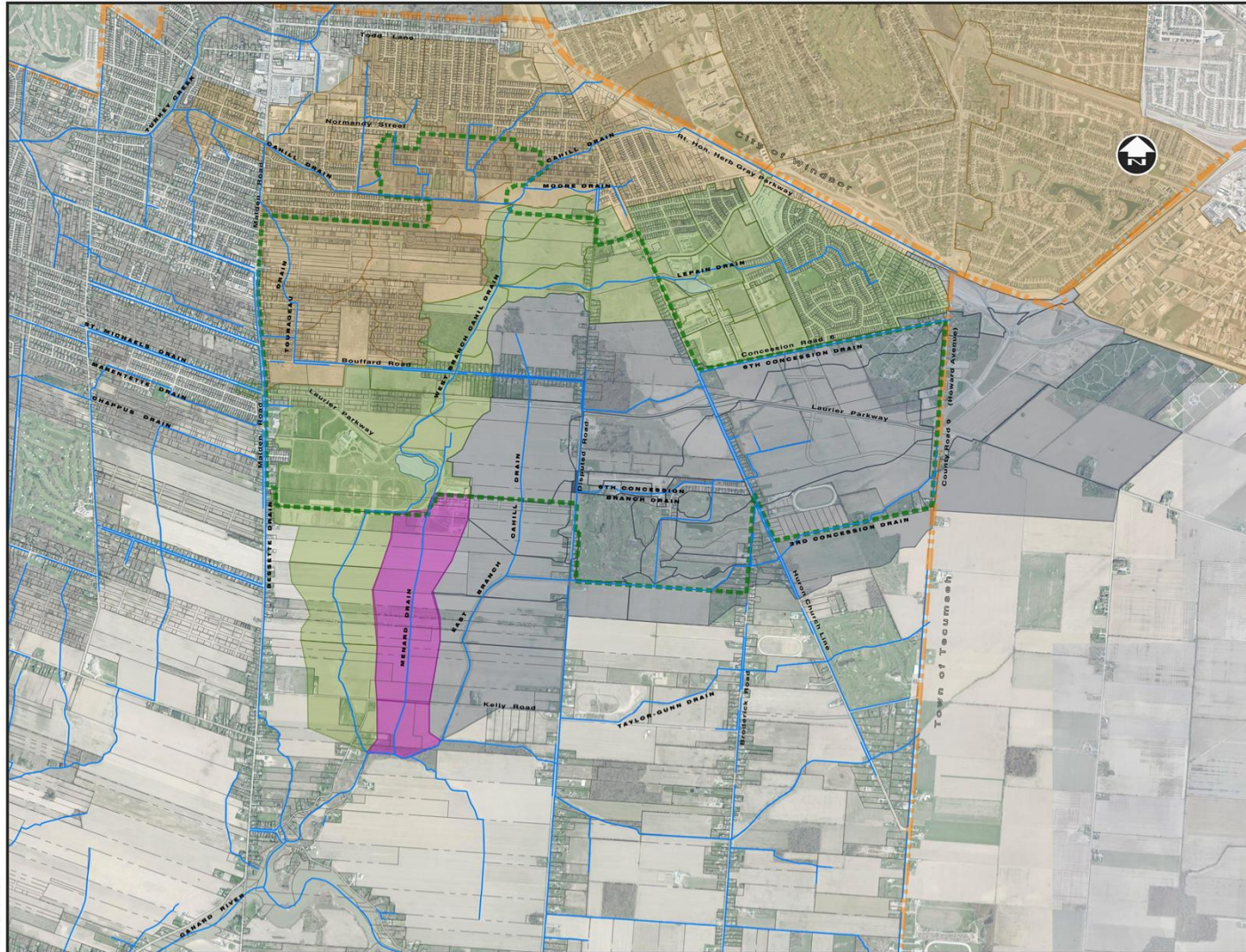
SCALE: N.T.S.

Figure 7
HOWARD BOUFFARD EXISTING AND POTENTIAL DEVELOPMENT AREAS

DATE: DECEMBER 2019
 Dillon Proj.No. 18-8169-1000

Map created by Dillon Consulting Inc. on 12/18/2019. Project No. 18-8169-1000. All rights reserved.

Existing Conditions – Municipal Drains and Drainage Areas



HOWARD BOUFFARD PLANNING AREA

Master Drainage Study

LEGEND

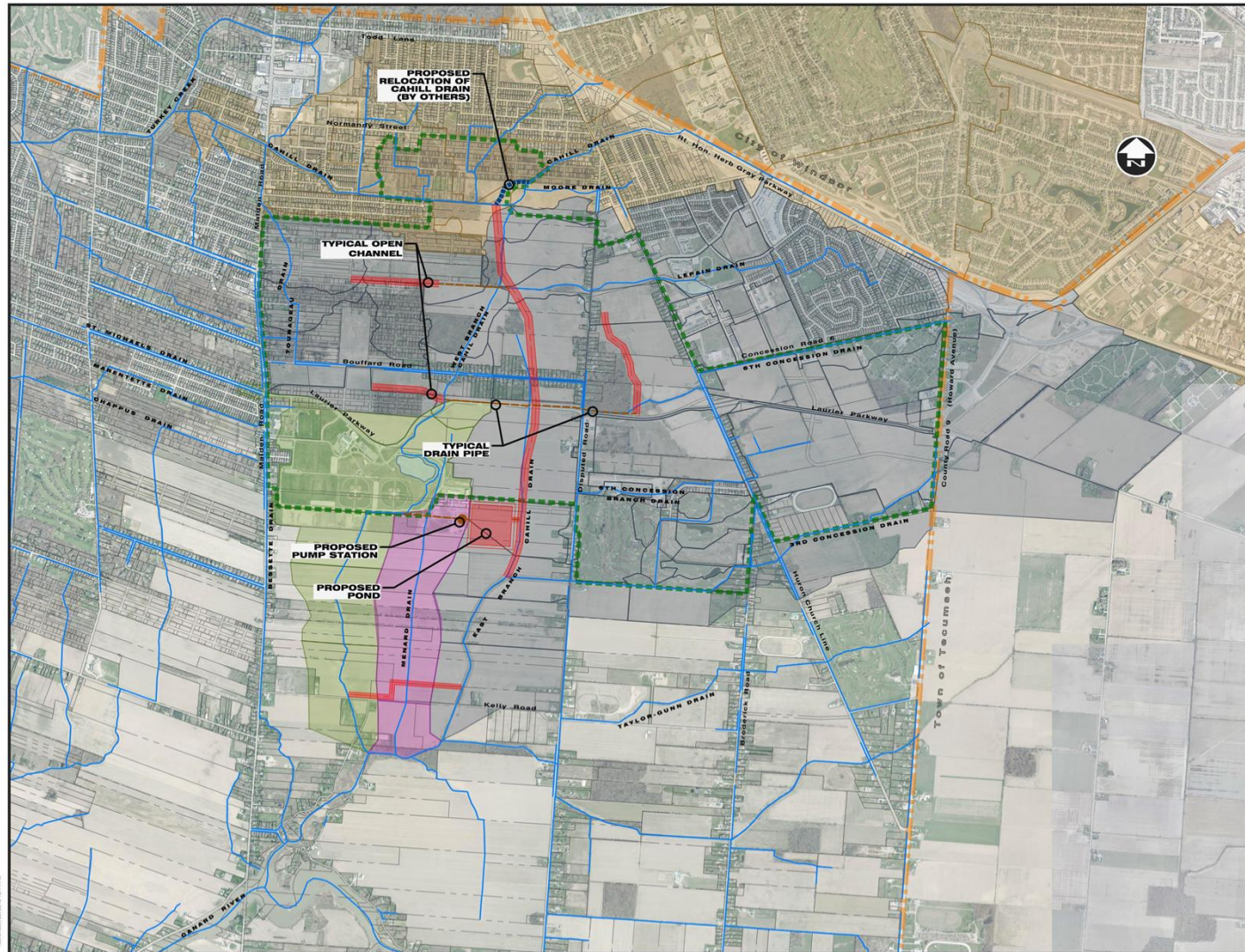
- MUNICIPAL BOUNDARY
- HOWARD BOUFFARD STUDY AREA
- Existing Municipal Drains
- Drainage Area Discharging to Cahill Drain
- Drainage Area Discharging to East Branch Cahill Drain
- Drainage Area Discharging to West Branch Cahill Drain
- Drainage Area Discharging to Menard Drain

SCALE: N.T.S.

Figure 4
EXISTING MUNICIPAL DRAINS AND DRAINAGE AREAS

DATE: DECEMBER 2019
Dillon Proj. No. 18-0169-1000

Proposed Conditions – Municipal Drains and Drainage Areas



HOWARD BOUFFARD PLANNING AREA
Master Drainage Study

LEGEND

- MUNICIPAL BOUNDARY
- HOWARD BOUFFARD STUDY AREA
- Pipe Drain Section
- Proposed Channel Alignment
- Existing Municipal Drains
- Drainage Area Discharging to Cahill Drain
- Drainage Area Discharging to East Branch Cahill Drain
- Drainage Area Discharging to West Branch Cahill Drain
- Drainage Area Discharging to Menard Drain

SCALE: N.T.S.

Figure 5
PROPOSED CONDITIONS NEW DRAIN, EXISTING MUNICIPAL DRAINS AND PROPOSED DRAINAGE AREAS

DATE: DECEMBER 2019
Dillon Proj. No. 18-8169-1000

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